

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/054456 A1

- (51) International Patent Classification⁷: C12N 9/88, 1/20, C12P 13/02, C12R 1/01
- (21) International Application Number: PCT/EP2004/013252
- (22) International Filing Date: 22 November 2004 (22.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0327907.2 2 December 2003 (02.12.2003) GB
0422070.3 6 October 2004 (06.10.2004) GB
- (71) Applicant (for all designated States except US): CIBA SPECIALTY CHEMICALS WATER TREATMENTS LIMITED [GB/GB]; Cleckheaton Road, Low Moor, Bradford, West Yorkshire BD12 0JZ (GB).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): HUGHES, Jonathan [GB/GB]; 6 Lightridge Road, Fixby, Huddersfield, West Yorkshire HS2 2HE (GB). ARMITAGE, Yvonne [GB/GB]; 21 Windmill View, Scholes, Holmfirth, West Yorkshire, HD9 1SA (GB). KULLAR, Jatinder [GB/GB]; 62 Whiteways, Off Bolton Lane, Bradford, West Yorkshire, BD2 4BJ (GB). GREENHALGH, Stuart [GB/GB]; 78 Riverside Court, Victoria Road, Saltaire, Bradford, West Yorkshire BD18 3LZ (GB).
- (74) Common Representative: CIBA SPECIALTY CHEMICALS WATER TREATMENTS LIMITED; Patents Department, Cleckheaton Road, Low Moor, Bradford, West Yorkshire BD12 0JZ (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: STRAIN OF RHODOCOCCUS RHODOCHROUS NCIMB 41164 AND ITS USE AS PRODUCER OF NITRILE HYDRATASE

(57) Abstract: A microorganism which is Rhodococcus rhodochrous strain NCIMB 41164 or a mutant thereof. A method of culturing the microorganism in a culture medium comprising urea or urea derivative is claimed. A nitrite hydratase obtainable from the microorganism is claimed. Also claimed is a process of preparing an amide from the corresponding nitrite wherein the nitrite is subjected to a hydration reaction in an aqueous medium in the presence of a biocatalyst selected from the group consisting of a microorganism which is a Rhodococcus rhodochrous strain NUMB 41164, a mutant thereof and a nitrite hydratase obtainable from Rhodococcus rhodochrous strain NCIMB 41164 or a mutant thereof. Also claimed is a method of storing the Rhodococcus rhodochrous NUMB 41164.

WO 2005/054456 A1